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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

First Named

Inventor : Stephen D. Richardson

Appln. No.: 10/600,297

Filed : June 20, 2003

For : ADAPTIVE MACHINE TRANSLATION

Docket No.: M61.12-0478

Appeal No. ---


Group Art Unit: 2193

Examiner: J. Chavis

**TRANSMITTAL OF APPEAL BRIEF  
(PATENT APPLICATION - 37 C.F.R. §41.37)**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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8<sup>th</sup> DAY OF June  
2007. 

PATENT ATTORNEY

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on April 19, 2007.

FEE STATUS

[---] Small entity status under 37 C.F.R. §§ 1.9 and 1.27 is established by a verified statement---

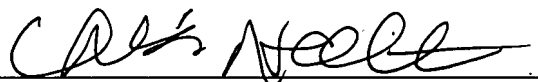
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Pursuant to 37 C.F.R. §41.20(b)(2) the fee for filing the Appeal Brief is \$500.00.

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Respectfully submitted,

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## APPEAL BRIEF FOR APPELLANT

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8th DAY OF June, 2007  
*[Signature]*  
PATENT ATTORNEY

Sir:

This is an appeal from a Final Office Action dated January 18, 2007, in which claims 1-39 were finally rejected. In the Final Office Action, the Examiner failed to include pending claims 40 and 41, which were properly added by Preliminary Amendment on August 27, 2003. Appellant respectfully submits that claims 1-41 are in allowable form, and thus requests that the Board reverse the Examiner and find that claims 1-41 are in condition for allowance.

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### **REAL PARTY IN INTEREST**

Microsoft Corporation, a corporation organized under the laws of the state of Washington, and having offices at One Microsoft Way, Redmond, Washington 98052, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment filed with the patent application and recorded on Reel 014228, frame 0564.

### **RELATED APPEALS AND INTERFERENCES**

There are no known related appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **STATUS OF THE CLAIMS**

- |      |  |      |
|------|--|------|
| I.   | Total number of claims in the application. |      |
|      | Claims in the application are:             | 1-41 |
| II.  | Status of all the claims.                  |      |
|      | A. Claims cancelled:                       | none |
|      | B. Claims withdrawn but not cancelled:     | none |
|      | C. Claims pending:                         | 1-41 |
|      | D. Claims allowed:                         | none |
|      | E. Claims rejected:                        | 1-39 |
|      | F. Claims Objected to:                     | none |
| III. | Claims on appeal                           |      |
|      | The claims on appeal are:                  | 1-41 |

### **STATUS OF AMENDMENTS**

Claims 1-39 were originally presented. A Preliminary Amendment filed on June 20, 2003, proposed amendments to claims 10, 15, 18, 27, 33 and 38. However, the Examiner refused to enter these June - 2003 preliminary claim amendments (the Examiner argued, incorrectly, that the format of the amendment was improper). With a response filed October 20, 2006, claims 1, 10,

15, 17, 18, 27, 29, 33, 38 and 39 were amended. In this 2006 response, in the spirit of cooperation, rather than argue about the format of the June – 2003 preliminary claim amendments, Applicant amended claims 10, 15, 18, 27, 33 and 38 to be substantially consistent with the amendments proposed in the June - 2003 Preliminary Amendment.

In addition, a Second Preliminary Amendment filed on August 27, 2003 proposed amendments to claims 2 and 15, and also presented new claims 40 and 41. While the amendments to claims 2 and 15 seem to have been entered and considered, the Examiner has failed to include claims 40 and 41 in the list of pending claims. Claims 1-41 are currently pending.

### **SUMMARY OF CLAIMED SUBJECT MATTER**

#### **1. Introduction**

The present invention deals with machine translation. More specifically, the present invention deals with means for systematically improving the performance of a user's automatic machine translation system within the normal workflow of acquiring corrected translations from a reliable source.

#### **2. Brief Background**

As a result of the growing international community created by technologies such as the Internet, machine translation, more specifically the utilization of a computer system to translate natural language texts, has achieved more widespread use in recent years. In some instances, machine translation can be automatically accomplished. However, human interaction is sometimes integrated into the process of creating a quality translation. Generally speaking, translations that rely on human resources are more accurate but less time and cost efficient than fully automated systems. For some translation systems, human interaction is relied upon only when translation accuracy is of critical importance. The time and cost associated with human interaction generally must be invested every time a particularly accurate translation is desired.

The quality of translations produced by fully automated machine translation has generally not increased with the rising demand for such systems. It is generally recognized that, in

order to obtain a higher quality automatic translation for a particular domain (or subject matter), significant customization must be done to the machine translation system. Customization typically includes the addition of specialized vocabulary and rules to translate texts in the desired domain. Such customization is typically achieved by trained computational linguists, who use semi-automated tools to add vocabulary items to online dictionaries, and who write linguistically oriented rules, typically in specialized rule writing languages. This type of customization is relatively expensive.

Overall, translation services, which are available to consumers from a variety of sources, fail to provide cost-efficient, high quality, customized translations. For example, shrink-wrapped and web-based translation systems are currently available to the general public. However, these translation systems are difficult or impossible to customize for a particular domain or subject matter. Commercial-grade translation systems are also available. These systems can be customized for specific domains, however, the customization process is tedious and typically quite expensive. Direct human-based translation services are also available (i.e., web-based and mail order based human translation services). However, human translations typically require payment of a fee for every document to be translated, an expense that never ends.

### **3. The Present Invention**

The present invention overcomes problems associated with prior approaches by providing an adaptive machine translation service for improving the performance of an automatic machine translation system. A user submits a source document to an automatic translation system. The source document and at least a portion of an automatically generated translation are then transmitted to a reliable modification source (i.e., a human translator) for review and correction. Training material is generated automatically based on modifications made by the reliable source. The automatic translation system is adapted based on the training material, thereby enabling the translation system to become customized through the normal workflow of acquiring corrected translations from a reliable source. Various additional embodiments pertain to specific implementations of the adaptive machine translation service in a variety of different computing

environment scenarios, including environments where system components are distributed across a computer network.

#### **4. The Claims**

Independent claim 1 is directed to a computer-implemented method (See Appellant's specification at FIGS. 7 and 8, and at page 36, lines 8-26, and at page 36, line 27 through page 37, line 14) for providing information to an automatic machine translation system (508) to improve translation accuracy. The method includes receiving (802, 702) a collection of source text that is expressed in a first natural language (See also FIG. 5A and page 18, line 24 through page 22, line 20). The method also includes receiving (802, 702) from the automatic machine translation system (508) an attempted translation that corresponds to the collection of source text (See also FIG. 5A and page 18, line 24 through page 22, line 20). As claimed, the attempted translation is expressed in a natural language other than the first natural language. The method also includes processing the attempted translation and the collection of source text to identify an error in the attempted translation. Finally, information is provided (708, 806) to the automatic machine translation system (508) to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system (508).

Independent claim 17 is directed to a computer-implemented method (See Appellant's specification at FIG. 3, and at page 14 through page 17, line 21) (See also FIG. 5A and page 18, line 24 through page 22, line 20) for improving the performance of an automatic machine translation system (508). The method includes employing the automatic machine translation system (508) to generate (330) a translation (304) of a collection of source text (302). As claimed, the collection of source text (302) is expressed in a first natural language and the translation (304) is expressed in a natural language other than the first natural language. The collection of source text (302) and at least a portion of the translation (304) are transferred to a reliable modification source (506). The method also includes receiving from the reliable modification (506) source an indication of an error in at least one portion of the translation (304). Finally, the automatic machine translation system (508) is trained such that the error will be less likely to occur for subsequent



translations generated by the automatic translation system (508).

Independent claim 29 is directed to a method (See Appellant's specification at FIG. 4, and at page 17, line 22 through page 18, line 21) (Also, see Appellant's specification at FIG. 3, and at page 14 through page 17, line 21) for improving the performance of an automatic machine translation system (508). The method includes employing (402) the automatic machine translation system (508) to generate a translation (304) of a collection of source text (302). As claimed, a confidence metric is associated with portions of the translation (304). Also, as claimed, the collection of source text (302) is expressed in a first natural language and the translation (304) is expressed in a natural language other than the first natural language. The method also includes evaluating (404) the confidence metric and selecting a low confidence portion of the translation. The low confidence portion is transmitted (404) across a computer network (505, 520) to a reliable modification source (506). The method includes utilizing (804) the reliable modification source (506) to generate a corrected version of the low confidence portion. An updated database of translation knowledge is generated (804) based on the corrected version of the low confidence portion. The method includes transmitting the updated database of translation knowledge across a computer network (505, 520) to the automatic machine translation system (508). Finally, the method includes incorporating (408) the updated database of translation knowledge into the automatic machine translation system (508) to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion.

Independent claim 39 is directed to a method (see Appellant's specification at FIG. 5B, and at page 22, line 21 through page 23, line 21) (Also, see Appellant's specification at FIG. 3, and at page 14 through page 17, line 21) for improving the performance of a self-customizing automatic machine translator (508). The method includes implementing a first self-customizing automatic translator on a first computing device (522) and a second self-customizing automatic translator on a second computing device (522). The method also includes providing a reliable translation source (506). As claimed, communication between the first and second computing devices (522) is enabled. The method includes receiving a source text (302) at the second computing device (522). The method includes supplying the second computing device (522) with a corrected version (306) of an attempted translation (304) produced by the reliable translation source

(508), the attempted translation (304) being an attempted translation of the source text. As claimed, the source text (302) is expressed in a first natural language and the attempted translation (304) is expressed in a natural language other than the first natural language. The method also includes utilizing the second self-customizing automatic translator to process the source text (302) and the corrected version (306) of the attempted translation (304) to produce training information (308) for adapting the first self-customizing automatic translator to subsequently translate text similar to the source text (302) with greater accuracy. The method also includes transferring the training information (308) from the second computing device (522) to the first computing device (522). The method also includes assimilating the training information (308) into the first self-customizing automatic translator to enable the first self-customizing automatic translator to subsequently translate with greater accuracy text similar to the source text (302).

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Whether claims 1-41 are anticipated under 35 U.S.C. §102(b) by U.S. Patent No. 6,279,969 (herein referred to as "the King reference").
2. Whether claims 1, 2, 8-18, 21-28, 29, 30 and 36-39 are anticipated under 35 U.S.C. §102(e) by U.S. Patent No. 7,054,803 (herein referred to as "the Eisele reference").
3. Whether claims 3-7, 19, 20 and 31-35 are obvious under 35 U.S.C. §103 based on the Eisele reference in view of "[Appellant's] choice of whether data is transferred from a local or remote database."
4. Whether claims 1-39 are anticipated under 35 U.S.C. §102(a) by WO 02/054280 to D'Agostini (hereinafter referred to as "the D'Agostini reference").
5. Whether pending claims 40 and 41 should be allowed given that they have been left out of all rejections.

**ARGUMENT**

1. THE EXAMINER'S FIRST REJECTION

Beginning on page 3 of the Final Office Action, the Examiner rejected claims 1-39 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,279,969. It is respectfully pointed out that the Examiner must have meant the reference to be 6,278,969 (hereinafter referred to as “the King reference”). For reasons that will be outlined below in detail, it is respectfully submitted that the rejected claims 1-39 are patentably distinguishable from the cited reference King reference.

A. CLAIM 1 IS ALLOWABLE OVER THE CITED KING REFERENCE

Independent claim 1 recites a method for providing information to an automatic machine translation system to improve translation accuracy. The method includes receiving an attempted translation from the automatic machine translation system and processing the attempted translation to identify an error. Notably, the claim also recites “providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic translation system.”

The King reference describes a machine translations system that includes a database containing poorly translated text that was created by a machine translation system (see column 6, lines 22-26). Also, for poorly translated text, the database includes a corresponding human corrected perfect translation text (see column 6, lines 32-36). The database is then essentially utilized as an index to support subsequent machine translation. For example, when the machine translation system subsequently produces a low quality translation, the database is searched for a record of the poor translation (see column 6, lines 40-43). If a match is found, the corresponding correct human translation is substituted for the low quality translation (see column 6, lines 40-43).

Thus, in contrast to claim 1, the King reference describes systems and methods that do nothing to reduce the likelihood that the automatic machine translation system will repeat the error in subsequent natural language translations. In fact, the King reference expects errors to

be repeated in subsequent translations. This is evident in that fact that the King reference teaches maintaining a collection of errors along with corresponding corrected text. The collection of errors is simply referenced like an index and a corrected text is substituted when the same error repeats itself in subsequent translations. Thus, the teachings of the King reference are fundamentally different than the limitations of claim 1. For at least this reasons, Appellant respectfully requests that the Board reverse the rejection of independent claim 1.

B. CLAIMS 2 AND 3 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 2 and 3 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claims 2 and 3 at least for this reason.

C. CLAIMS 4-7 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 4-7 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 4-7 specifically limit the claimed step of receiving an attempted translation from an automatic machine translation system to receiving by particular claimed schemes of communication.

In claim 4, the attempted translation is received by way of a computer network from a client upon which the automatic machine translation is implemented. In claim 5, the computer network is defined as the Internet.

In claim 6, the attempted translation is received by way of a server upon which the automatic machine translation is implemented. In claim 7, this reception of the attempted translation is limited to being by way of a computer network.

In response to claims 4-7, the Examiner simply points to the King reference at FIGS. 1-3. These Figures show components of an illustrative data processing system. The

system and its components are described beginning at column 2, line 63 and ending at about column 5, line 36. While the illustrated data processing system does include a client-server communication scheme, the only explanation of what processing occurs where within the system is at column 5, line 232. At this point, the reference states that “software program code which employs the present invention is typically stored in the memory of a storage device 232 of a stand-alone workstation or LAN server from which a developer may access the code for distribution purposes.”

However, there is absolutely no teaching or suggestion in the King reference of an attempted translation being received by way of a computer network from a client upon which an automatic machine translation is implemented. Nor is there any teaching or suggestion of an attempted translation being received by way of a server upon which the automatic machine translation is implemented. Nor is there any teaching or suggestion of this latter reception being by way of a computer network. The King reference does not say nearly enough to jump to the conclusion that the elements of claims 4-7 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 4-7 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 4-7.

D. CLAIMS 8-16 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 8-16 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 8-16 specifically limit the claimed step of providing information to the automatic machine translation system. More particularly, claim 8 defines the provided “information” as being information to be assimilated into the machine translation system (i.e., as indicated in claim 1, to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system).

Still further, each of claims 9-16 very narrowly limits the precise nature of the data to be provided for assimilation. Claim 9 defines the information as “update information to

be assimilated into a knowledge source associated with the automatic machine translation system.” Claim 10 defines the information as “update information to be assimilated into at least one translation correspondence.” Claim 11 defines the information as “update information to be assimilated into a collection of linguistic structures.” Claim 12 defines the information as “update information to be assimilated into a database of corresponding logical forms.” Claim 13 defines the information as “update information to be assimilated into a collection of statistical parameters.” Claim 14 defines the information as “update information to be assimilated into a collection of parsing information that enables a parser to provide analysis of a collection of segments.” Claim 15 defines the information as “update information to be assimilated into a collection of corresponding word or phrase associations.” Claim 16 defines the information as “bilingual corpora.”

The King reference simply teaches substituting a corrected text for a text that contains an error. The King reference does, at column 6, lines 47-48, say that “[a]s algorithms for [m]achine [t]ranslation get better[,] the previous malformed entries in the database can be removed...”. However, there is absolutely no teaching or suggestion as to how algorithms for machine translation are improved. There certainly is no teaching or suggestion of the very specific methods of claims 8-16 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 8-16 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 8-16.

E. CLAIM 17 IS ALLOWABLE OVER THE CITED KING REFERENCE

Independent claim 17 also recites a method for improving the performance of an automatic machine translation system. The method includes receiving from a reliable modification source an indication of an error in at least one portion of a translation produced by the automatic machine translation system. Further, claim 17 recites “training the automatic machine translation system such that the error will be less likely to occur for subsequent translations generated by the automatic translation system.”

The King reference describes a machine translations system that includes a database containing poorly translated text that was created by a machine translation system (see column 6, lines 22-26). Also, for poorly translated text, the database includes a corresponding human corrected perfect translation text (see column 6, lines 32-36). The database is then essentially utilized as an index to support subsequent machine translation. For example, when the machine translation system subsequently produces a low quality translation, the database is searched for a record of the poor translation (see column 6, lines 40-43). If a match is found, the corresponding correct human translation is substituted for the low quality translation (see column 6, lines 40-43).

Thus, in contrast to claim 17, the King reference describes systems and methods that do nothing to reduce the likelihood that the automatic machine translation system will repeat the error in subsequent translations. In fact, the King reference expects errors to be repeated in subsequent translations. This is evident in that fact that the King reference teaches maintaining a collection of errors along with corresponding corrected text. The collection of errors is simply referenced like an index and a corrected text is substituted when the same error repeats itself in subsequent translations. Thus, the teachings of the King reference are fundamentally different than the limitations of claim 17. For at least this reasons, Appellant respectfully requests that the Board reverse the rejection of independent claim 17.

F. CLAIM 18 IS ALLOWABLE OVER THE CITED KING REFERENCE

Claim 18 is dependent upon independent claim 17 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claim 18 at least for this reason.

G. CLAIMS 19 AND 20 ARE ALLOWABLE OVER THE CITED KING REFERENCE

Claims 19 and 20 are dependent upon independent claim 17 and are believed to be allowable at least for the same reasons described above in support of patentability of that

independent claim. Further, however, claims 19 and 20 specifically limit the claimed step of transferring a collection of source text and at least a portion of its translation.

In claim 19, transferring comprises transferring from a client device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

In claim 20, transferring comprises transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

In response to claims 19 and 20, the Examiner simply points to the King reference at FIGS. 1-3. These Figures show components of an illustrative data processing system. The system and its components are described beginning at column 2, line 63 and ending at about column 5, line 36. While the illustrated data processing system does include a client-server communication scheme, the only explanation of what processing occurs where within the system is at column 5, line 232. At this point, the reference states that "software program code which employs the present invention is typically stored in the memory of a storage device 232 of a stand-alone workstation or LAN server from which a developer may access the code for distribution purposes."

However, there is absolutely no teaching or suggestion in the King reference of transferring a collection of source text and at least a portion of its translation from a client device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. The Examiner provides no indication as to why it might be obvious, in light of the teachings of the King reference, to associate the machine translation system and the reliable modification source with different computing devices. Nor is there any teaching or suggestion of transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. The King reference does not say nearly enough to jump to the conclusion that the elements of claims 19 and 20 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 19 and 20 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 19 and 20.



H. CLAIMS 21-28 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 21-28 are dependent upon independent claim 17 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 21-28 specifically limit the claimed step of training the automatic machine translation system. More particularly, claim 21 defines training as updating a knowledge source associated with the system (i.e., as indicated in claim 17, to reduce the likelihood that the error will be repeated in subsequent translations generated by the automatic machine translation system).

Still further, each of claims 22-28 very narrowly limits the precise nature of the knowledge source that is updated. Claim 22 defines the knowledge source as “at least one translation correspondence associated with the automatic machine translation system.” Claim 23 defines the knowledge source as “a collection of linguistic structures.” Claim 24 defines the knowledge source as “a database of corresponding logical forms.” Claim 25 defines the knowledge source as “a collection of statistical parameters.” Claim 26 defines the knowledge source as “a collection of parsing information that enables a parser to provide analysis of a collection of segments.” Claim 27 defines the knowledge source as “a collection of corresponding word or phrase associations.” Claim 28 defines training as providing “bilingual corpora.”

The King reference simply teaches substituting a corrected text for a text that contains an error. The King reference does, at column 6, lines 47-48, say that “[a]s algorithms for [m]achine [t]ranslation get better[,] the previous malformed entries in the database can be removed...”. However, there is absolutely no teaching or suggestion as to how algorithms for machine translation are improved. There certainly is no teaching or suggestion of the very specific methods of claims 22-28 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 22-28 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 22-28.

I. CLAIM 29 IS ALLOWABLE OVER THE CITED KING REFERENCE

Independent claim 29 recites yet another method for improving the performance of an automatic machine translation system. The method includes generating an updated database of translation knowledge based on a corrected version of a low confidence portion of a translation. The method also includes “incorporating the updated database of translation knowledge into the automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion.”

The King reference describes a machine translations system that includes a database containing poorly translated text that was created by a machine translation system (see column 6, lines 22-26). Also, for poorly translated text, the database includes a corresponding human corrected perfect translation text (see column 6, lines 32-36). The database is then essentially utilized as an index to support subsequent machine translation. For example, when the machine translation system subsequently produces a low quality translation, the database is searched for a record of the poor translation (see column 6, lines 40-43). If a match is found, the corresponding correct human translation is substituted for the low quality translation (see column 6, lines 40-43).

Thus, in contrast to claim 29, the King reference essentially describes an index that correlates translation errors to corrected translations. The information in this index is not used to enable an automatic machine translation system to subsequently translate with greater accuracy. Instead, the index is simply used as a replacement table. The index does nothing to avoid making the same error twice. In fact, the index depends upon the same error being made again, and again, and again.

The King reference does, at column 6, lines 47-48, say that “[a]s algorithms for [m]achine [t]ranslation get better[,] the previous malformed entries in the database can be removed...”. However, there is absolutely no teaching or suggestion as to how algorithms for machine translation are improved. There certainly is no teaching or suggestion of the very specific method of claim 29 for improving the automatic machine translation system so as to

reduce the likelihood of repeating an error. For all of these reasons, claim 29 is believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claim 29.

J. CLAIM 30 IS ALLOWABLE OVER THE CITED KING REFERENCE

Claim 30 is dependent upon independent claim 29 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claim 30 at least for this reason.

K. CLAIMS 31 AND 32 ARE ALLOWABLE OVER THE CITED KING REFERENCE

Claims 31 and 32 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 31 and 32 claim limitations that are independently distinguishable from the cited King reference.

In claim 31, the claimed step of transmitting a low confidence portion to a reliable modification source is limited to transmitting across the Internet. Further, the claimed step of transmitting an updated database of translation knowledge to an automatic machine translation system is limited to transmitting across the Internet.

In claim 32, the automatic machine translation system is limited to being implemented on a client computing device.

In response to claims 31 and 32, the Examiner simply points to the King reference at FIGS. 1-3. These Figures show components of an illustrative data processing system. The system and its components are described beginning at column 2, line 63 and ending at about column 5, line 36. While the illustrated data processing system does include a client-server communication scheme, the only explanation of what processing occurs where within the system is at column 5, line 232. At this point, the reference states that "software program code which employs the present invention is typically stored in the memory of a storage device 232 of a

stand-alone workstation or LAN server from which a developer may access the code for distribution purposes.”

However, there is absolutely no teaching or suggestion in the King reference of transmitting a low confidence portion across the Internet to a reliable modification source. Nor is there any teaching or suggestion of transmitting an updated database of translation knowledge across the Internet to an automatic machine translation system. Nor is there any teaching or suggestion that implementation of an automatic machine translation system should be on a client computing device. The King reference does not say nearly enough to jump to the conclusion that the elements of claims 31 and 32 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 31 and 32 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 31 and 32.

L. CLAIMS 33-38 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 33-38 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 33-38 specifically limit the claimed step of incorporating a database of translation knowledge (i.e., as indicated in claim 29, to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion). More particularly, each of claims 33-38 very narrowly limits the precise nature of translation knowledge that is incorporated. Claim 33 defines the translation knowledge “at least one updated translation correspondence.” Claim 34 defines the translation knowledge as “at least one updated linguistic structure.” Claim 35 defines the translation knowledge as “an update to a database of corresponding logical forms.” Claim 36 defines the translation knowledge as “an update to a collection of statistical parameters.” Claim 37 defines the translation knowledge as “an update to a collection of parsing information that enables a parser to provide analysis of a collection of segments.” Claim 38 defines the translation knowledge as “an update to a collection of corresponding word or phrase associations.”

The King reference simply teaches substituting a corrected text for a text that contains an error. The King reference does, at column 6, lines 47-48, say that “[a]s algorithms for [m]achine [t]ranslation get better[,] the previous malformed entries in the database can be removed...”. However, there is absolutely no teaching or suggestion as to how algorithms for machine translation are improved. There certainly is no teaching or suggestion of the very specific methods of claims 33-38 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 33-38 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 33-38.

M. CLAIM 39 IS ALLOWABLE OVER THE CITED KING REFERENCE

Independent claim 39 recites a method for improving the performance of a self-customizing automatic machine translator. The method includes utilizing an automatic translator to produce training information for adapting a different automatic translator to subsequently translate text with greater accuracy. The training information is assimilated into the different automatic translator to enable it to subsequently translate with greater accuracy.

The King reference describes a machine translations system that includes a database containing poorly translated text that was created by a machine translation system (see column 6, lines 22-26). Also, for poorly translated text, the database includes a corresponding human corrected perfect translation text (see column 6, lines 32-36). The database is then essentially utilized as an index to support subsequent machine translation. For example, when the machine translation system subsequently produces a low quality translation, the database is searched for a record of the poor translation (see column 6, lines 40-43). If a match is found, the corresponding correct human translation is substituted for the low quality translation (see column 6, lines 40-43).

In contrast to claim 39, the King reference fails to teach or suggest any method or system that enables an automatic translation system to learn from the mistakes of another system. Even if it were within the scope of the teachings of King for multiple translation systems to contribute a common index that correlates translation errors to corrections, this in no way enables

the systems to avoid making the same errors again. The King reference simply fails to teach or suggest the method of claim 39.

In rejection claim 39, the Examiner simply points to the rejection of claims 1 and 2 and suggests that similar analysis applies. However, the elements of claim 39 are very different than the elements of claims 1 and 2. As it happens, there is nothing in the King reference that teaches or suggests utilizing an automatic translator to produce training information for adapting a different automatic translator to subsequently translate text with greater accuracy. Further, there is nothing in the cited reference that teaches or suggests an assimilation of training information into a different automatic translator to enable it to subsequently translate with greater accuracy. For these reasons, claim 39 is believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claim 39.

2. THE EXAMINER'S SECOND REJECTION

On page 6 of the Final Office Action, the Examiner rejected claims 1, 2, 8-18, 21, 28, 29-30 and 36-39 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,054,803 (hereinafter referred to as "the Eisele reference"). For reasons that will be outlined below in detail, it is respectfully submitted that these claims are patentably distinguishable from that reference.

A. CLAIM 1 IS ALLOWABLE OVER THE CITED EISELE REFERENCE

Independent claim 1 recites a method for providing information to an automatic machine translation system to improve translation accuracy. The method includes receiving an attempted translation from the automatic machine translation system and processing the attempted translation to identify an error. Notably, the claim also recites "providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic translation system."

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). In general, the methods involve aligning bilingual texts based on translation accuracy.

In response to the “providing information” element of claim 1, the Examiner points to the Eisele reference at column 2, lines 24-45. A close examination of this passage; however, reveals that the Eisele reference actually teaches methods and systems for aligning text from a first document with text in a corresponding second document that has been translated into a different language. The reference fails to teach or suggest any method for adapting a machine translation system to prevent repeated errors. The reference simply describes aligning bilingual text based on translation accuracy. For at least this reason, it is respectfully submitted that independent claim 1 is patentably distinguishable from the cited Eisele reference. Appellant respectfully requests that the Board reverse the rejection of claim 1.

**B. CLAIM 2 IS ALLOWABLE OVER THE CITED EISELE REFERENCE**

Claim 2 is dependent upon independent claim 1 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claim 2 specifically limits the claimed step of providing information to the automatic machine translation system to providing a corrected translation (i.e., to the automatic machine translation system).

In rejecting claim 2, the Examiner simply points to the rationale used for the rejection of claim 1. In particular, the Examiner points to the Eisele reference at FIG. 4 and at col. 2, lines 24-45. A close examination of this cited material, and indeed the entire Eisele reference, reveals that the cited reference actually teaches not much more than methods for aligning bilingual texts based on translation accuracy. The reference fails to teach or suggest any method for providing information to an automatic machine translation system, let alone providing a corrected translation as claimed in dependent claim 2. For at least this additional reason, it is respectfully submitted that dependent claim 2 is patentably distinguishable from the cited Eisele reference. Appellant respectfully requests that the Board reverse the rejection of claim 2.

C. CLAIMS 8-16 ARE ALLOWABLE OVER THE CITED EISELE  
REFERENCE

Claims 8-16 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 8-16 specifically limit the claimed step of providing information to the automatic machine translation system. More particularly, claim 8 defines the provided "information" as being information to be assimilated into the machine translation system (i.e., as indicated in claim 1, to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system).

Still further, each of claims 9-16 very narrowly limits the precise nature of the data to be provided for assimilation. Claim 9 defines the information as "update information to be assimilated into a knowledge source associated with the automatic machine translation system." Claim 10 defines the information as "update information to be assimilated into at least one translation correspondence." Claim 11 defines the information as "update information to be assimilated into a collection of linguistic structures." Claim 12 defines the information as "update information to be assimilated into a database of corresponding logical forms." Claim 13 defines the information as "update information to be assimilated into a collection of statistical parameters." Claim 14 defines the information as "update information to be assimilated into a collection of parsing information that enables a parser to provide analysis of a collection of segments." Claim 15 defines the information as "update information to be assimilated into a collection of corresponding word or phrase associations." Claim 16 defines the information as "bilingual corpora."

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. In other words, the Eisele reference generally pertains to methods and systems for aligning text from a first document with text in a corresponding second document that has been translated into a different language (column 2, lines 24-45).



In rejecting claims 8-16, the Examiner simply points to the rationale used for the rejection of claim 1. In particular, the Examiner points to the Eisele reference at FIG. 4 and at col. 2, lines 24-45. A close examination of this cited material, and indeed the entire Eisele reference, reveals that the cited reference actually teaches not much more than methods for aligning bilingual texts. The reference fails to teach or suggest any method for providing information to an automatic machine translation system to improve translation accuracy, let alone providing information in the very specific ways defined in claims 8-16. For at least these additional reasons, it is respectfully submitted that dependent claim 8-16 are patentably distinguishable from the cited Eisele reference. Appellant respectfully requests that the Board reverse the rejection of claims 8-16.

**D. CLAIM 17 IS ALLOWABLE OVER THE CITED EISELE REFERENCE**

Independent claim 17 also recites a method for improving the performance of an automatic machine translation system. The method includes receiving from a reliable modification source an indication of an error in at least one portion of a translation produced by the automatic machine translation system. Further, claim 17 recites "training the automatic machine translation system such that the error will be less likely to occur for subsequent translations generated by the automatic translation system."

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. In other words, the Eisele reference generally pertains to methods and systems for aligning text from a first document with text in a corresponding second document that has been translated into a different language (column 2, lines 24-45).

In rejecting claim 17, the Examiner points to the same rationale used in the rejection of claim 1. However, the elements of claim 17 are very much different than the elements of claim 1. As it happens, the Eisele reference fails to teach or suggest identifying an error in a translation, and certainly in no way raises the concept of training a translation system to be less likely to repeat the error in subsequent translations. The Examiner provides no explanation for these missing elements. Thus, the teachings of the Eisele reference are

fundamentally different than the limitations of claim 17. For at least this reasons, Appellant respectfully requests that the Board reverse the rejection of independent claim 17.

E. CLAIM 18 IS ALLOWABLE OVER THE CITED EISELE REFERENCE

Claim 18 is dependent upon independent claim 17 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, it is respectfully submitted that claim 18 itself teaches limitations that are independently distinguishable from the cited Eisele reference.

Claim 18 adds a limitation of "generating a confidence metric representing a quality measurement with regard to [a] translation." The claim also adds "selecting the portion of the translation transferred to [a] reliable modification source based at least in part upon the confidence metric."

In response to claim 18, the Examiner says nothing more then "[t]he features of claim 18 are taught via claim 13." Appellant is unsure what this means. The limitations of claim 13 have nothing to do with the limitations of claim 18. Further, the Examiner says almost nothing about the rejection of claim 13 ("rejected as claim 1 above").

Regardless, the cited Eisele reference does not teach or suggest anything remotely similar to selecting, based on a confidence metric, a portion of a translation for transfer to a reliable modification source. The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. Thus, claim 18 is patentably distinguishable from the cited Eisele reference. Appellant respectfully requests that the Board reverse the rejection of claim 18 at least for this reason.

F. CLAIMS 21-28 ARE ALLOWABLE OVER THE CITED EISELE REFERENCE

Claims 21-28 are dependent upon independent claim 17 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 21-28 specifically limit the claimed step of training

the automatic machine translation system. More particularly, claim 21 defines training as updating a knowledge source associated with the system (i.e., as indicated in claim 17, to reduce the likelihood that the error will be repeated in subsequent translations generated by the automatic machine translation system).

Still further, each of claims 22-28 very narrowly limits the precise nature of the knowledge source that is updated. Claim 22 defines the knowledge source as "at least one translation correspondence associated with the automatic machine translation system." Claim 23 defines the knowledge source as "a collection of linguistic structures." Claim 24 defines the knowledge source as "a database of corresponding logical forms." Claim 25 defines the knowledge source as "a collection of statistical parameters." Claim 26 defines the knowledge source as "a collection of parsing information that enables a parser to provide analysis of a collection of segments." Claim 27 defines the knowledge source as "a collection of corresponding word or phrase associations." Claim 28 defines training as providing "bilingual corpora."

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. In other words, the Eisele reference generally pertains to methods and systems for aligning text from a first document with text in a corresponding second document that has been translated into a different language (column 2, lines 24-45). There certainly is no teaching or suggestion of the very specific methods of claims 22-28 for improving an automatic machine translation system so as to reduce the likelihood of repeating an error.

In rejecting claim 21, the Examiner simply states "see claim 9." But the only thing the Examiner says about the rejection of claim 9 is "[claim 9] is rejected as claim 1 above." Similarly, in rejection claims 22-27, the Examiner simply says "see the rejection of claims 11-14." But the only the Examiner says about the rejection of claims 11-14 is "[claims 11-14] are rejected as claim 1 above." Accordingly, the Examiner has failed to reasonably support the rejection. Regardless, the entire Eisele reference lacks any teaching or suggestion of the methods of claims 21-28 for improving an automatic machine translation system so as to reduce the likelihood of repeating an error. For at least these additional reasons, claims 21-28 are believed

to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 21-28.

G. CLAIM 29 IS ALLOWABLE OVER THE CITED EISELE REFERENCE

Independent claim 29 recites yet another method for improving the performance of an automatic machine translation system. The method includes "evaluating [a] confidence metric and selecting a low confidence portion of [a] translation." The method also includes transmitting the low confidence portion across a computer network to a reliable modification source." The method also includes generating an updated database of translation knowledge based on a corrected version of a low confidence portion of a translation. The method also includes "transmitting the updated database of translation knowledge across a computer network to the automatic translation system." The method also includes "incorporating the updated database of translation knowledge into the automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion."

In supporting the rejection of claim 29, the Examiner simply says "[s]ee the rejection of claims 1-2." However, the elements of claim 29 are very different than the elements of claims 1 and 2. Claims 1 and 2 have nothing, whatsoever, to do with a confidence metric. Nor do claims 1 and 2 have anything to do with transmitting a low confidence portion of a translation across a computer network. Nor do claims 1 and 2 have anything to do with transmitting an updated database of translation knowledge across computer network. These are just examples of differences between claim 29 and claims 1/2. In the rejection of claim 29, the Examiner makes no statement, whatsoever about any of these differences in claim limitations.

In fact, a close examination of the Eisele reference reveals that there is no teaching or suggesting of utilization of a confidence metric or transmissions of data across a computer network, as claimed in claim 29. There certainly is no teaching or suggestion of the very specific method of claim 29 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For all of these reasons, claim 29 is believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claim 29.

H. CLAIM 30 IS ALLOWABLE OVER THE CITED EISELE REFERENCE

Claim 30 is dependent upon independent claim 29 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claim 30 at least for this reason. Further, it is respectfully submitted that the Eisele reference fails to teach or suggest utilizing a human translator to generate a corrected version of a translation, as claimed. The Examiner supports the rejection of claim 30 by pointing to the rejection of claims 1 and 2, but claims 1 and 2 have nothing to do with human translation. It is respectfully submitted that claim 30 is in allowable form for these additional reasons.

I. CLAIMS 36-38 ARE ALLOWABLE OVER THE CITED EISELE REFERENCE

Claims 36-38 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 36-38 specifically limit the claimed step of incorporating a database of translation knowledge (i.e., as indicated in claim 29, to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the law confidence portion). More particularly, each of claims 36-38 very narrowly limits the precise nature of translation knowledge that is incorporated. Claim 36 defines the translation knowledge as "an update to a collection of statistical parameters." Claim 37 defines the translation knowledge as "an update to a collection of parsing information that enables a parser to provide analysis of a collection of segments." Claim 38 defines the translation knowledge as "an update to a collection of corresponding word or phrase associations."

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. In other words, the Eisele reference generally pertains to methods and systems for aligning text from a first document with text in a corresponding second

document that has been translated into a different language (column 2, lines 24-45). There certainly is no teaching or suggestion of the very specific methods of claims 36-38.

In rejecting claims 36-38, the Examiner simply states "[s]ee the rejection of claims 1-2." But the limitations of claims 36-38 are substantially different than the limitations of claims 1 and 2. Accordingly, the Examiner has failed to reasonably support the rejection. Regardless, the Eisele reference fails to teach or suggest anything remotely similar to the elements of claim 36-38. For all of these additional reasons, claims 36-38 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 36-38.

J. CLAIM 39 IS ALLOWABLE OVER THE CITED EISELE REFERENCE

Independent claim 39 recites a method for improving the performance of a self-customizing automatic machine translator. The method includes utilizing an automatic translator to produce training information for adapting a different automatic translator to subsequently translate text with greater accuracy. The training information is assimilated into the different automatic translator to enable it to subsequently translate with greater accuracy.

The Eisele reference pertains to methods for extracting translations from translated texts (See Title, Abstract, and column 2). The methods involve aligning bilingual texts based on translation accuracy. In other words, the Eisele reference generally pertains to methods and systems for aligning text from a first document with text in a corresponding second document that has been translated into a different language (column 2, lines 24-45). In contrast to claim 39, the Eisele reference fails to teach or suggest any method or system that enables an automatic translation system to learn from the mistakes of another system. The Eisele reference simply fails to teach or suggest the method of claim 39.

In rejection claim 39, the Examiner simply points to the rejection of claims 1 and 2 and suggests that similar analysis applies. However, the elements of claim 39 are very different than the elements of claims 1 and 2. As it happens, there is nothing in the Eisele reference that teaches or suggests utilizing an automatic translator to produce training information for adapting a different automatic translator to subsequently translate text with greater accuracy. Further, there

is nothing in the cited reference that teaches or suggests an assimilation of training information into a different automatic translator to enable it to subsequently translate with greater accuracy. For these reasons, claim 39 is believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claim 39.

3. THE EXAMINER'S THIRD REJECTION

Beginning on page 7 of the Final Office Action, the Examiner rejected claims 3-7, 19, 20 and 31-35 under 35 U.S.C. §103 as being unpatentable over the Eisele reference in view of "[a]pplicant's choice of whether data is transferred from a local or remote database."

In supporting this rejection, the Examiner simply states that "...it would have been obvious to a person having ordinary skill in [t]he art at the time of the invention to provide for translations regardless of the source to enable users local and remote that speak different languages to communicate or understand transmitted communications." With all due respect to the Examiner, Appellant really has no idea what the Examiner is trying to do with this rejection under §103. Appellant notes that absolutely no prior art has been cited in combination with the Eisele reference to support the rejection despite the fact that the limitations of the claims are much more substantial than mere design choices. During prosecution, Appellant did ask the Examiner, in writing, for clarification but received none. Further Appellant stated, in writing, that if this was an attempt to take official notice, the attempt was traversed and a specific showing of prior art was requested. It is respectfully submitted that, even in light of recent changes in case law related to the standards necessary to support a rejection under §103, this rejection falls well short of what is necessary to support the rejection. Appellant respectfully requests that the Board overturn the rejection of claims 3-7, 19, 20 and 31-35 at least for these reasons and also for the more specific reasons as outlined below.

A. CLAIMS 3-7 ARE ALLOWABLE OVER THE CITED EISELE  
REFERENCE

Claims 3-7 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described in section "2.A." above in support of

patentability of that independent claim. Further, however, claims 3-7 specifically limit the claimed step of receiving an attempted translation from an automatic machine translation system to receiving by particular claimed schemes of communication.

In claim 3, the attempted translation is received from a client upon which the automatic machine translation system is implemented. In claim 4, the attempted translation is received by way of a computer network from a client upon which the automatic machine translation is implemented. In claim 5, the computer network is defined as the Internet. In claim 6, the attempted translation is received by way of a server upon which the automatic machine translation is implemented. In claim 7, this reception of the attempted translation is limited to being by way of a computer network.

In response to claims 3-7, the Examiner essentially argues that the limitations would simply be obvious to one skilled in the art. Despite Appellant's request for specific prior art showing the dependent claims limitations, no art has even been cited.

The one reference cited in the rejection is the Esele reference. In the Final Office Action, the Examiner essentially concedes that the elements of claims 3-7 are not taught in the Esele reference. It is further submitted that there is absolutely no teaching or suggestion in the reference of an attempted translation being received from a client upon which an automatic machine translation is implemented, let alone being received under such circumstances by way of a computer network. Nor is there any teaching or suggestion of an attempted translation being received by way of a server upon which the automatic machine translation is implemented. Nor is there any teaching or suggestion of this latter reception being by way of a computer network. The prior art of record does not say enough to jump to the conclusion that the elements of claims 3-7 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 3-7 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 3-7.

**B. CLAIMS 19 and 20 ARE ALLOWABLE OVER THE CITED EISELE  
REFERENCE**



Claims 19 and 20 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described in section "2.D." above in support of patentability of that independent claim.

Further, however, claims 19 and 20 specifically limit the claimed step of transferring a collection of source text and at least a portion of its translation. In claim 19, transferring comprises transferring from a client device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. In claim 20, transferring comprises transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

In response to claims 19 and 20, the Examiner essentially argues that the limitations would simply be obvious to one skilled in the art. Despite Appellant's request for specific prior art showing the dependent claims limitations, no art has even been cited.

The one reference cited in the rejection is the Esele reference. In the Final Office Action, the Examiner essentially concedes that the elements of claims 19 and 20 are not taught in the Esele reference. It is further submitted that there is absolutely no suggestion of the features of the claim elements. The prior art of record does not say enough to jump to the conclusion that the elements of claims 19 and 20 are obvious. Accordingly, it is respectfully submitted that claims 19 and 20 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 19 and 20.

C. CLAIMS 31-35 ARE ALLOWABLE OVER THE CITED EISELE  
REFERENCE

Claims 31-35 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described in section "2.G." above in support of patentability of that independent claim. Further, it is respectfully submitted that each of claims 31-35 recites limitations that are independently patentable based on the merit of its own claims limitations.

In claim 31, the claimed step of transmitting a low confidence portion to a reliable modification source is limited to transmitting across the Internet. Further, the claimed step of transmitting an updated database of translation knowledge to an automatic machine translation system is limited to transmitting across the Internet. In claim 32, the automatic machine translation system is limited to being implemented on a client computing device.

As the Examiner essentially concedes, there is no teaching in the Esele reference of transmitting a low confidence portion across the Internet to a reliable modification source. Nor is there any teaching or suggestion of transmitting an updated database of translation knowledge across the Internet to an automatic machine translation system. Nor is there any teaching or suggestion that implementation of an automatic machine translation system should be on a client computing device.

Claims 33-35 specifically limit the claimed step of incorporating a database of translation knowledge (i.e., as indicated in claim 29, to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion). More particularly, each of claims 33-35 very narrowly limits the precise nature of translation knowledge that is incorporated. Claim 33 defines the translation knowledge "at least one updated translation correspondence." Claim 34 defines the translation knowledge as "at least one updated linguistic structure." Claim 35 defines the translation knowledge as "an update to a database of corresponding logical forms."

As the Examiner essentially concedes, there is absolutely no teaching in the Esele reference as to how an algorithm for machine translation might be improved. There certainly is no teaching or suggestion of the very specific methods of claims 33-35 for improving an automatic machine translation system so as to reduce the likelihood of repeating an error.

In response to the many elements of claims 31-35 missing from the cited reference, the Examiner essentially argues that the limitations would simply be obvious to one skilled in the art. Despite Appellant's request for specific prior art showing the dependent claims limitations, no art has even been cited. It is respectfully submitted that the prior art of record does not say enough to jump to the conclusion that the elements of claims 31-35 are obvious. Appellant respectfully requests that the Board reverse the rejection of claims 31-35.

3. THE EXAMINER'S FOURTH REJECTION

Beginning on page 8 of the Final Office Action, the Examiner rejected claims 1-39 under 35 U.S.C. §102(a) as being anticipated by WO 02/054280 to D'Agostini (hereinafter referred to as "the D'Agostini reference").

A. CLAIM 1 IS ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Independent claim 1 recites a method for providing information to an automatic machine translation system to improve translation accuracy. The method includes receiving an attempted translation from the automatic machine translation system and processing the attempted translation to identify an error. Notably, the claim also recites "providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic translation system."

The D'Agostini reference describes a translation system with an interface for post-translation evaluation and editing by a human operator (see page 1, lines 4-20). In response to the elements of claim 1, the examiner points to the D'Agostini reference at page 19, line 14 through page 20, line 6. A close examination of this passage; however, reveals that there is no teaching or suggestion of an identification of an error in an attempted translation based on a computer-implemented processing of an attempted translation and a collection of corresponding source text. Error identification, in accordance with the teachings of the D'Agostini reference, is, at best, a manual process. Thus, the teachings of the D'Agostini reference are fundamentally different than the limitations of claim 1. For at least these reasons, Appellant respectfully requests that the Board reverse the rejection of independent claim 1.

B. CLAIMS 2 AND 3 ARE ALLOWABLE OVER THE CITED  
D'AGOSTINI REFERENCE

Claims 2 and 3 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claims 2 and 3 at least for this reason.

C. CLAIMS 4-7 ARE ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Claims 4-7 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 4-7 specifically limit the claimed step of receiving an attempted translation from an automatic machine translation system to receiving by particular claimed schemes of communication.

In claim 4, the attempted translation is received by way of a computer network from a client upon which the automatic machine translation is implemented. In claim 5, the computer network is defined as the Internet. In claim 6, the attempted translation is received by way of a server upon which the automatic machine translation is implemented. In claim 7, this reception of the attempted translation is limited to being by way of a computer network.

In response to claims 4-7, the Examiner simply points to the D'Agostini reference at page 27, lines 9-18 without any explanation. It is respectfully pointed out that this passage, and indeed the entire reference, fails to teach or suggest receiving an attempted translation by way of a computer network, and certainly does not teach or suggest receiving by way of the Internet. The cited passage seems to describe "autolearning" from teachings derived from outside corrections but this is in now way indicative of receiving an attempted translation by way of a computer network. The D'Agostini reference does not say nearly enough to jump to the conclusion that the elements of claims 4-7 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 4-7 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 4-7.

D. CLAIMS 8-16 ARE ALLOWABLE OVER THE CITED D'AGOSTINI

## REFERENCE

Claims 8-16 are dependent upon independent claim 1 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 8-16 specifically limit the claimed step of providing information to the automatic machine translation system. More particularly, claim 8 defines the provided "information" as being information to be assimilated into the machine translation system (i.e., as indicated in claim 1, to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system).

Still further, each of claims 9-16 very narrowly limits the precise nature of the data to be provided for assimilation. Claim 9 defines the information as "update information to be assimilated into a knowledge source associated with the automatic machine translation system." Claim 10 defines the information as "update information to be assimilated into at least one translation correspondence." Claim 11 defines the information as "update information to be assimilated into a collection of linguistic structures." Claim 12 defines the information as "update information to be assimilated into a database of corresponding logical forms." Claim 13 defines the information as "update information to be assimilated into a collection of statistical parameters." Claim 14 defines the information as "update information to be assimilated into a collection of parsing information that enables a parser to provide analysis of a collection of segments." Claim 15 defines the information as "update information to be assimilated into a collection of corresponding word or phrase associations." Claim 16 defines the information as "bilingual corpora."

In support of the rejection of claims 8-16, the Examiner simply says "see rejection of claim 1." However, the elements of claims 8-16 are very much different than the elements of claim 1. A close examination of the entire D'Agostini reference (including the passages cited against claim 1) reveals that there is absolutely no teaching or suggestion of the very specific methods of claims 8-16 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 8-16 are believed to be

in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 8-16.

E. CLAIM 17 IS ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Independent claim 17 also recites a method for improving the performance of an automatic machine translation system. The method includes transferring a collection of source text and at least a portion of a corresponding translation to a reliable modification source. The D'Agostini reference describes a translation system with an interface for post-translation evaluation and editing by a human operator (see page 1, lines 4-20). It is respectfully submitted that the cited D'Agostini reference fails to teach or suggest transferring information as recited. In accordance with the D'Agostini, source text and corresponding translations are never transferred but are instead simply presented to a user through a graphical user interface. Accordingly, the teachings of the King reference are fundamentally different than the limitations of claim 17. For at least these reasons, Appellant respectfully requests that the Board reverse the rejection of independent claim 17.

F. CLAIM 18 IS ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Claim 18 is dependent upon independent claim 17 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, it is respectfully submitted that dependent claim 18 is patentable based on the merit of its own limitations. Claim 18 recites generating a confidence metric and utilizing that metric as a basis for selecting a portion of a translation to be transferred to the reliable modification source. In rejecting this claim, the Examiner simply states that "the features are taught by claim 13." Appellant is not sure what this means. Regardless, the cited D'Agostini reference neither teaches nor suggests generating and utilizing a confidence metric as claimed. Appellant respectfully requests that the Board reverse the rejection of claim 18 at least for this reason.

G. CLAIMS 19 AND 20 ARE ALLOWABLE OVER THE CITED KING  
REFERENCE

Claims 19 and 20 are dependent upon independent claim 17 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 19 and 20 specifically limit the claimed step of transferring a collection of source text and at least a portion of its translation. In claim 19, transferring comprises transferring from a client device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. In claim 20, transferring comprises transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

In support of the rejection of claims 19 and 20, the Examiner simply points to the D'Agostini reference at page 27, lines 9-18 without any explanation. It is respectfully pointed out that this passage, and indeed the entire reference, fails to teach or suggest transferring a collection of source text and at least a portion of its translation from a client device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. The Examiner provides no indication as to why it might be obvious, in light of the teachings of the D'Agostini reference, to associate the machine translation system and the reliable modification source with different computing devices. Nor is there any teaching or suggestion of transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source. The D'Agostini reference does not say nearly enough to jump to the conclusion that the elements of claims 19 and 20 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 19 and 20 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 19 and 20.

H. CLAIMS 21-28 ARE ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Claims 21-28 are dependent upon independent claim 17 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 21-28 specifically limit the claimed step of training the automatic machine translation system. More particularly, claim 21 defines training as updating a knowledge source associated with the system (i.e., as indicated in claim 17, to reduce the likelihood that the error will be repeated in subsequent translations generated by the automatic machine translation system).

Still further, each of claims 22-28 very narrowly limits the precise nature of the knowledge source that is updated. Claim 22 defines the knowledge source as “at least one translation correspondence associated with the automatic machine translation system.” Claim 23 defines the knowledge source as “a collection of linguistic structures.” Claim 24 defines the knowledge source as “a database of corresponding logical forms.” Claim 25 defines the knowledge source as “a collection of statistical parameters.” Claim 26 defines the knowledge source as “a collection of parsing information that enables a parser to provide analysis of a collection of segments.” Claim 27 defines the knowledge source as “a collection of corresponding word or phrase associations.” Claim 28 defines training as providing “bilingual corpora.”

There is absolutely no teaching or suggestion in the D'Agostini reference as to how algorithms for machine translation might specifically be improved. There certainly is no teaching or suggestion of the very specific methods of claims 21-28 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 21-28 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 21-28.

#### I. CLAIM 29 IS ALLOWABLE OVER THE CITED D'AGOSTINI REFERENCE

Independent claim 29 recites yet another method for improving the performance of an automatic machine translation system. The method includes generating an updated database of translation knowledge based on a corrected version of a low confidence portion of a



translation. The method also includes “incorporating the updated database of translation knowledge into the automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion.”

Independent claim 29 recites a method that includes transmitting a portion of a translation that is identified with a low confidence metric across a computer network to a reliable modification source. It is respectfully pointed out that the D’Agostini reference fails to teach or suggest any transfer of a low confidence portion of a translation to a reliable modification source. In the rejection of claim 29, the Examiner makes no attempt to address these elements missing from the cited reference. The Examiner simply points to the rejection of other claims that do not even contain the same limitations. For at least these reasons, it is respectfully submitted that independent claim 29 is in allowable form.

J. CLAIM 30 IS ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Claim 30 is dependent upon independent claim 29 and is believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Appellant respectfully requests that the Board reverse the rejection of claim 30 at least for this reason.

K. CLAIMS 31 AND 32 ARE ALLOWABLE OVER THE CITED  
D'AGOSTINI REFERENCE

Claims 31 and 32 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 31 and 32 claim limitations that are independently distinguishable from the cited King reference. In claim 31, the claimed step of transmitting a low confidence portion to a reliable modification source is limited to transmitting across the Internet. Further, the claimed step of transmitting an updated database of translation knowledge to an automatic machine translation system is limited to transmitting across the Internet. In claim 32,

the automatic machine translation system is limited to being implemented on a client computing device.

In supporting the rejection of claims 31 and 32, the Examiner provides very little guidance. A close examination of the entire D'Agostini reference; however, reveals there is absolutely no teaching or suggestion of transmitting a low confidence portion across the Internet to a reliable modification source. Nor is there any teaching or suggestion of transmitting an updated database of translation knowledge across the Internet to an automatic machine translation system. Nor is there any teaching or suggestion that implementation of an automatic machine translation system should be on a client computing device. The King reference does not say nearly enough to jump to the conclusion that the elements of claims 31 and 32 are anticipated or even obvious. Accordingly, it is respectfully submitted that claims 31 and 32 are allowable for these additional reasons. Appellant respectfully requests that the Board reverse the rejection of claims 31 and 32.

L. CLAIMS 33-38 ARE ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Claims 33-38 are dependent upon independent claim 29 and are believed to be allowable at least for the same reasons described above in support of patentability of that independent claim. Further, however, claims 33-38 specifically limit the claimed step of incorporating a database of translation knowledge (i.e., as indicated in claim 29, to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion). More particularly, each of claims 33-38 very narrowly limits the precise nature of translation knowledge that is incorporated. Claim 33 defines the translation knowledge "at least one updated translation correspondence." Claim 34 defines the translation knowledge as "at least one updated linguistic structure." Claim 35 defines the translation knowledge as "an update to a database of corresponding logical forms." Claim 36 defines the translation knowledge as "an update to a collection of statistical parameters." Claim 37 defines the translation knowledge as "an update to a collection of parsing information that enables a

parser to provide analysis of a collection of segments.” Claim 38 defines the translation knowledge as “an update to a collection of corresponding word or phrase associations.”

There is absolutely no teaching or suggestion in the D'Agostini reference as to how algorithms for machine translation might specifically be improved. There certainly is no teaching or suggestion of the very specific methods of claims 33-38 for improving the automatic machine translation system so as to reduce the likelihood of repeating an error. For these additional reasons, claims 33-38 are believed to be in allowable form. Appellant respectfully requests that the Board reverse the rejection of claims 33-38.

M. CLAIM 39 IS ALLOWABLE OVER THE CITED D'AGOSTINI  
REFERENCE

Independent claim 39 recites a method for improving the performance of a self-customizing automatic machine translator. In rejection claim 39, the Examiner simply points to the rejection of claims 1-16 and suggests that similar analysis applies. However, the elements of claim 39 are very different than the elements of claims 1-16. Independent claim 39 recites a first automatic translator that is implemented on a computing device that is separate from a computing device upon which a second automatic translator is implemented. The second automatic translator is provided with a source text and a corrected version of an attempted translation. The second automatic translator processes the source text and the corrected version of the attempted translation to produce training information. The training information is transferred to the second computing device and assimilated so as to enable the first automatic translator to translate with greater accuracy text similar to the source text. Appellant respectfully requests that the Board reverse the rejection of claim 39.

5. PENDING CLAIMS 40 AND 41 ARE PENDING AND SHOULD BE  
ALLOWED

A Second Preliminary Amendment filed on August 27, 2003 presented new claims 40 and 41. The Preliminary Amendment was entered. Thus, claims 40 and 41 are currently pending. At least because the claims have not been rejected, they should be allowed.

Claim 40 is dependent upon independent claim 1 and is believed to be allowable at least for the same reasons described in the present appeal brief in support of patentability of that independent claim. Further, however, claim 40 specifically limits the claimed step of providing information to be assimilated to providing a bilingual corpus of one or more sentences. None of the references cited in the office action teach or suggest the elements of claim 40. It is respectfully submitted that claim 40 should be allowed for this additional reason.

Claim 41 is dependent upon independent claim 17 and is believed to be allowable at least for the same reasons described in the present appeal brief in support of patentability of that independent claim. Further, however, claim 41 specifically limits the claimed step of training the automatic machine translation system to providing a bilingual corpus of one or more sentences. None of the references cited in the office action teach or suggest the elements of claim 41. It is respectfully submitted that claim 40 should be allowed for this additional reason.

6. CONCLUSION : CLAIMS 1-41 SHOULD BE ALLOWED

In conclusion, Appellant respectfully submits that claims 1-41 are allowable over the cited references for at least the reasons laid out above. Thus, Appellant respectfully requests that the Board reverse the rejections of claims 1-39 and find all pending claims 1-41 in condition for allowance. The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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**Appendix: Claims On Appeal**

Claims as they currently stand:

1. A computer implemented method for providing information to an automatic machine translation system to improve translation accuracy, the method comprising:

receiving a collection of source text that is expressed in a first natural language;  
receiving from the automatic machine translation system an attempted translation that corresponds to the collection of source text, wherein the attempted translation is expressed in a natural language other than the first natural language;

processing the attempted translation and the collection of source text to identify an error in the attempted translation; and

providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system.

2. The method of claim 1, wherein providing information to the automatic machine translation system comprises:

correcting the error; and  
providing a corrected translation.

3. The method of claim 1, wherein said receiving from the automatic machine translation system comprises receiving from a client upon which the automatic machine translation system is implemented.

4. The method of claim 3, wherein receiving from a client comprises receiving by way of a computer network.

5. The method of claim 4, wherein receiving by way of a computer network comprises receiving by way of the Internet.

6. The method of claim 1, wherein said receiving from the automatic machine translation system comprises receiving from a server upon which the automatic machine translation system is implemented.

7. The method of claim 6, wherein said receiving from a server comprises receiving by way of a computer network.

8. The method of claim 1, wherein providing information comprises providing information to be assimilated into the automatic machine translation system.

9. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into a knowledge source associated with the automatic machine translation system.

10. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into at least one translation correspondence associated with the automatic machine translation system.

11. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into a collection of linguistic structures associated with the automatic translation system.

12. The method of claim 11, wherein providing information to be assimilated comprises providing update information to be assimilated into a database of corresponding logical forms associated with the automatic machine translation system.

13. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into a collection of statistical parameters

associated with the automatic machine translation system.

14. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into a collection of parsing information associated with the automatic machine translation system, the parsing information being information that enables a parser to provide analysis of a collection of segments.

15. The method of claim 8, wherein providing information to be assimilated comprises providing update information to be assimilated into a collection of corresponding word or phrase associations associated with the automatic machine translation system.

16. The method of claim 8, wherein providing information to be assimilated comprises providing bilingual corpora.

17. A computer-implemented method for improving the performance of an automatic machine translation system, the method comprising:

employing the automatic machine translation system to generate a translation of a collection of source text, wherein the collection of source text is expressed in a first natural language and the translation is expressed in a natural language other than the first natural language;

transferring the collection of source text and at least a portion of the translation to a reliable modification source;

receiving from the reliable modification source an indication of an error in at least one portion of the translation; and

training the automatic machine translation system such that the error will be less likely to occur for subsequent translations generated by the automatic translation system.

18. The method of claim 17, further comprising:

generating a confidence metric representing a quality measurement with regard to the

translation; and  
selecting the a portion of the translation transferred to the reliable modification source  
based at least in part upon the confidence metric.

19. The method of claim 17, wherein said transferring comprises transferring from a client computing device, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

20. The method of claim 17, wherein said transferring comprises transferring from a server, upon which the automatic machine translation system is implemented, to a server computing device associated with the reliable modification source.

21. The method of claim 17, wherein training the automatic machine translation system comprises updating a knowledge source associated with the automatic machine translation system.

22. The method of claim 17, wherein training the automatic machine translation system comprises updating at least one translation correspondence associated with the automatic machine translation system.

23. The method of claim 17, wherein training the automatic machine translation system comprises updating a collection of linguistic structures associated with the automatic machine translation system.

24. The method of claim 23, wherein training the automatic machine translation system comprises updating a database of corresponding logical forms associated with the automatic machine translation system.

25. The method of claim 17, wherein training the automatic machine translation system



comprises updating a collection of statistical parameters associated with the automatic machine translation system.

26. The method of claim 17, wherein training the automatic machine translation system comprises updating a collection of parsing information associated with the automatic machine translation system, the parsing information being information that enables a parser to provide analysis of a collection of segments.

27. The method of claim 17, wherein training the automatic machine translation system comprises updating a collection of corresponding word or phrase associations associated with the automatic machine translation system.

28. The method of claim 17, wherein training the automatic machine translation system comprises providing bilingual corpora based on the error to the automatic machine translation system and enabling it to train itself based on the bilingual corpora.

29. A method for improving the performance of an automatic machine translation system, the method comprising:

employing the automatic machine translation system to generate a translation of a collection of source text, a confidence metric being associated with portions of the translation, and wherein the collection of source text is expressed in a first natural language and the translation is expressed in a natural language other than the first natural language;

evaluating the confidence metric and selecting a low confidence portion of the translation;

transmitting the low confidence portion across a computer network to a reliable modification source;

utilizing the reliable modification source to generate a corrected version of the low confidence portion;

generating an updated database of translation knowledge based on the corrected version of the low confidence portion;  
transmitting the updated database of translation knowledge across a computer network to the automatic machine translation system; and  
incorporating the updated database of translation knowledge into the automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion.

30. The method of claim 29, wherein utilizing the reliable modification source to generate a corrected version comprises utilizing a human translator.

31. The method of claim 29, wherein transmitting across a computer network comprising transmitting across the Internet.

32. The method of claim 29, wherein the automatic machine translation system is implemented on a client computing device.

33. The method of claim 29, wherein incorporating the database of translation knowledge comprises incorporating at least one updated translation correspondence.

34. The method of claim 29, wherein incorporating the database of translation knowledge comprises incorporating at least one updated linguistic structure.

35. The method of claim 34, wherein incorporating the database of translation knowledge comprises incorporating at least one update into a database of corresponding logical forms.

36. The method of claim 29, wherein incorporating the database of translation knowledge comprises incorporating at least one update into a collection of statistical parameters.

37. The method of claim 29, wherein incorporating the database of translation knowledge comprises incorporating at least one update into a collection of parsing information that enables a parser to provide analysis of a collection of segments.

38. The method of claim 29, wherein incorporating the database of translation knowledge comprises incorporating at least one update into a collection of corresponding word or phrase associations.

39. A method for improving the performance of a self-customizing automatic machine translator, the method comprising:

- implementing a first self-customizing automatic translator on a first computing device;
- implementing a second self-customizing automatic translator on a second computing device;
- providing a reliable translation source;
- enabling communication between the first and second computing devices;
- receiving at the second computing device a source text;
- supplying the second computing device with a corrected version of an attempted translation produced by the reliable translation source, the attempted translation being an attempted translation of the source text, and wherein the source text is expressed in a first natural language and the attempted translation is expressed in a natural language other than the first natural language;
- utilizing the second self-customizing automatic translator to process the source text and the corrected version of the attempted translation to produce training information for adapting the first self-customizing automatic translator to subsequently translate text similar to the source text with greater accuracy;
- transferring the training information from the second computing device to the first computing device; and
- assimilating the training information into the first self-customizing automatic translator to

enable the first self-customizing automatic translator to subsequently translate with greater accuracy text similar to the source text.

40. The method of claim 8, wherein providing information to be assimilated comprises providing a bilingual corpus of one or more sentences.

41. The method of claim 17, wherein training the automatic machine translation system comprises providing a bilingual corpus of one or more sentence pairs to the automatic machine translation system.

**Appendix: Evidence**

There is no evidence submitted by Appellant in support of this appeal.

**Appendix: Related Proceedings**

There are no related proceedings for this appeal.